Claims

Having thus described the invention, what is claimed as new and desired to be secured by Letters Patent is as follows:

1. An apparatus for removing paint from a surface, comprising:

a canister at least partially containing a coolant under high pressure;

a housing mounted atop said canister and having proximal and distal ends, said proximal end having an air inlet port and said distal end having first and second outlet ports;

a trigger mounted in said housing and extending therefrom for movement between first, second, and third configurations;

a coolant channel extending between said canister and said first outlet port;

an air channel extending between said air inlet port and said second outlet port;

air delivering means cooperating with said trigger for delivering a compressed air stream through said air channel to said second outlet port when said trigger is at said second configuration; and

actuating means cooperating with said trigger for actuating said canister to deliver a portion of said coolant through said coolant channel to said first outlet port when said trigger is at said third configuration.

2. The apparatus as in claim 1 wherein said actuating means includes a primary valve positioned in said housing and operatively coupled to said trigger, said actuating means including an actuator arm having a proximal end coupled to said primary valve and a distal end adjacent an actuator valve situated atop said canister for depressing said actuator valve

when said trigger is at said second configuration, whereby said coolant portion is delivered through said coolant channel.

3. The apparatus as in claim 1 wherein said actuating means includes a primary valve positioned in said housing and operatively coupled to said trigger for directing said compressed air stream from said air channel against an actuator valve on a top of said canister when said trigger is at said second configuration, whereby said coolant portion is delivered through said coolant channel.

4. The apparatus as in claim 1 wherein said air delivering means includes a primary valve positioned in said housing and operatively coupled to said trigger, said primary valve being connected to said air channel for allowing said compressed air stream to flow through said air channel when said trigger is at said third configuration.

5. The apparatus as in claim 1 further comprising first and second outlet nozzles removably coupled to first and second outlet ports, respectively for directing said coolant portion and said compressed air stream.

6. The apparatus as in claim 1 further comprising a blade rotatably connected to said distal end of said housing for scraping paint from a surface.

7. The apparatus as in claim 6 wherein said blade is removably coupled to said distal end of said housing.

8. The apparatus as in claim 1 wherein:

said canister is a heat exchanger; and

said coolant is solid carbon dioxide.

9. The apparatus as in claim 8 wherein said actuating means includes:

a primary valve positioned in said housing and coupled to said trigger, said primary valve being operatively connected to said air channel;

an air hose connected to said primary valve and extending into said heat exchanger, said air hose having an open end adjacent a bottom of said heat exchanger for directing said compressed air stream into said heat exchanger.

10. The apparatus as in claim 9 wherein said housing is sealed against a top of said heat exchanger in an airtight relationship.

11. The apparatus as in claim 9 wherein said heat exchanger defines an open top and includes a screen covering said open top for allowing gaseous carbon dioxide to be directed through said first outlet port when said trigger is at said second configuration and preventing passage of solid carbon dioxide particles, wherein said compressed air stream flowing into said heat exchanger causes a portion of said solid carbon dioxide to be converted into gaseous carbon dioxide.

12. An apparatus for removing paint from a surface, comprising:

a canister at least partially containing a pressurized coolant;

a housing having a body portion and a handle, said body portion defining first and second outlet ports and said handle defining an inlet port capable of receiving a compressed air stream, said body portion being removably coupled to a top of said canister;

a coolant channel extending between said canister top and said first outlet port for selectively communicating said coolant therebetween;

an air channel extending between said inlet port and said second outlet port for selectively communicating a compressed air stream therebetween; and

a primary valve positioned in said body portion of said housing in communication with said coolant and air channels and selectively movable between a first configuration closing said coolant channel and said air channel, a second configuration enabling said coolant to flow through said coolant channel, and a third configuration enabling the compressed air stream to flow through said air channel.

13. The apparatus as in claim 12 further comprising a trigger coupled to said primary valve for user movement of said primary valve between said first, second, and third configurations.

14. The apparatus as in claim 13 wherein said primary valve is configured to divert the compressed air stream against an actuator valve atop said top of said canister when said primary valve is at said second configuration, whereby to deliver a portion of said coolant into said coolant channel.

15. The apparatus as in claim 13 further comprising an actuator arm having a proximal end coupled to said trigger and a distal end adjacent an actuator valve atop said canister, said distal end of said actuator arm depressing said actuator valve to release a portion of said coolant into said coolant channel when said trigger is moved so as to position said primary valve at said second configuration.

16. The apparatus as in claim 12 further comprising a blade rotatably coupled to said body portion of said housing adjacent said first and second outlet ports.

17. The apparatus as in claim 16 further comprising first and second nozzles removably coupled to first and second outlet ports, respectively.

18. The apparatus as in claim 12 wherein:

said canister is a heat exchanger; and

said coolant is solid carbon dioxide.

19. The apparatus as in claim 18 further comprising an air hose connected to said air channel and extending into said heat exchanger, said air hose having an open end adjacent a bottom of said heat exchanger for directing the compressed air stream upon the solid carbon dioxide.

20. The apparatus as in claim 18 wherein said heat exchanger defines an open top and includes a filter covering said open top for allowing gaseous carbon dioxide to be directed through said first outlet port when said trigger is at said second configuration and preventing passage of solid carbon dioxide particles, wherein said compressed air stream

flowing into said heat exchanger causes a portion of said solid carbon dioxide to be converted into gaseous carbon dioxide.